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09/645,450	08/25/2000	Takeiki Aizono	ASA-912	4368

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EXAMINER

WINDER, PATRICE L

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/645,450

Applicant(s)

AIZONO ET AL.

Examiner

Patrice Winder

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Supplemental DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the reference numbers in the specification do not correspond to the reference numbers in the drawings. For example: in Figure 2 roadside station 121 is referred to as roadside station 121200 on page 2, line 8 of the specification.

Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the following reference numbers are not in the drawings: 121200, 410450, etc. The proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-3 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Tso et al., USPN 6,047,327 (hereafter referred to as Tso).

5. Regarding claim 1, Tso taught a transport system having a plurality of processing units interconnected through a network (column 2, line 54 – column 3, line 7), said processing units each executing predetermined processing for a mobile body (column 1, lines 44-52, column 1, line 66 – column 2, line 6), wherein:

each of said processing units (InfoCast server) comprises:

means for receiving location information indicative of a location at which a mobile body associated with the processing unit exists (column 18, lines 28-34);

means for determining whether or not said processing is executed based on said location information (column 18, lines 35-49); and

means for executing said processing based on the result of determination (column 18, line 48 – column 19, line 59).

6. Regarding dependent claim 2, Tso taught said means for receiving receives contents information indicative of the contents of a request for processing (column 17, line 40 – column 18, line 26); and

said means for determining determines whether or not processing corresponding to said contents information is executed based on said location information (column 18, lines 35-49).

7. Regarding dependent claim 3, Tso taught said existing location indicates a location at which said mobile body existed at the time said location information was transmitted (column 4, lines 8-14, column 18, lines 33-34).

8. Regarding dependent claim 6, Tso taught said location information is transmitted from said mobile body (column 17, line 42 – column 18, line 10);

said location information indicates a location at which said mobile body is moving when said location information is transmitted (column 18, line 1-10); and

said means for determining compares the location indicated by said location information with a location at which said processing unit exists, and determines that said processing should be executed when the result of the comparison indicates that the location indicated by said location information is within a predetermine distance from the location at which said processing unit exists (column 18, lines 35-49).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 7-9, 11-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hancock et al., USPN 6,202,023 B1 (hereafter referred to Hancock).

11. Regarding claim 7, Hancock taught an information processing method in a transport system having a plurality of processing units interconnected through a network (column 24, lines 14-18, 39-49, column 25, lines 15-21), said processing units each executing predetermined processing for a mobile body (column 24, lines 43-46, column 26, lines 12-22), said method comprising the steps of:

said mobile body transmitting request information to at least one of said plurality of processing units, said request information including contents of a request for said

Art Unit: 2155

processing, and location information indicative of a location at which said mobile body exists (column 28, lines 11-13, 49-54, column 29, lines 36-39);

a processing unit which received said request information, transmitting said request information to said plurality of processing units through a network (column 26, lines 8-11); and

each of said plurality of processing units which have received said request information, determining based on said location information whether or not said processing unit should execute processing corresponding to a request indicated by said contents information (column 31, lines 1-4, 32-36, 48-64).

12. Regarding dependent claim 8, Hancock taught request information further includes identification information for identifying said mobile body (packet header includes source address which corresponds to identification information).

13. Regarding dependent claim 9, Hancock taught mobile body periodically transmits confirmation information until said processing after said request information is transmitted (column 32, lines 4-31).

14. Regarding claim 11, Hancock taught a processing unit interconnected with a plurality of identical processing units through a network to constitute a transport system for executing predetermined processing for mobile body (column 24, lines 39-49, column 31, lines 55-56, 61-64), said processing unit (column 32, line 51 –37) comprising:

a memory for storing a program for executing predetermined processing (column 31, lines 5-9);

a communication interface connected to said network for receiving location information indicative of a location at which a mobile body associated with processing exists (column 31, lines 17-20); and

a processor connected to said communication interface and said memory through a bus, for receiving said location information from said communication interface, determining whether or not said processing should be executed based on a program stored in memory, and executing said processing based on the result of the determination (column 31, lines 61-64, 32-36).

15. Regarding dependent claim 12, Hancock taught communication interface receives contents information indicative of contents of a request for said processing (column 28, lines 49-57, column 29, lines 29-38); and

said processor determines whether or not said processing should be executed based on said location information (column 31, lines 61-64, 32-36).

16. Regarding dependent claim 13, Hancock taught existing location indicates a location at which said mobile body existed at the time said location information is transmitted (column 28, lines 21-23).

17. Regarding dependent claim 14, Hancock taught location information indicates a location at which said mobile exists at the time said processing should be executed (column 29, lines 39-43, 46-55); and

said communication interface further receives identification information for identifying said mobile body (packet header includes source address which corresponds to identification information).

Art Unit: 2155

18. Regarding dependent claim 15, Hancock taught location information indicates a location at which said mobile body exists at the time said processing should be executed (column 29, lines 39-43, 46-55); and

said communication interface further receives time information indicative of a time at which said processing should be executed (column 31, lines 17-20).

19. Regarding dependent claim 16, Hancock taught communication interface receives said location information transmitted from said mobile body (column 29, lines 29-55, column 31, lines 18-23); and

said processor compares the location indicated in the location information with a location at which said processing unit exists, and determines that said processing should be executed when the location indicated by said location information is within a predetermine distance from the location at which said processing unit exists (column 32, lines 4-31).

20. Regarding dependent claim 17, Hancock taught location information is at least one of location at which said mobile exists when said location information is transmitted, and a location at which said mobile body transmitting said location information is estimated to exist at the time requested processing is executed (column 28, lines 20-22).

21. Regarding dependent claim 18, Hancock taught processor determines whether at least one of a straight distance between a location indicated by said location information and a location at which said processing unit exists, and a distance between the location indicated by said location information and the location at which said processing unit

Art Unit: 2155

exists, in consideration of a route on which said mobile body is moving, is within a predetermined distance (column 29, lines 11-14, column 30, lines 11-21).

22. Regarding dependent claim 20, Hancock taught network is connected to a local server apparatus which stores information on a predetermined region (column 24, lines 43-46); and said processing executes processing searching said local server apparatus for requested information through said communication interface as said predetermined processing (column 24, lines 43-49).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2155

25. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso in view of Hancock.

26. Regarding dependent claim 4, Tso taught said means for receiving further receives identification information for identifying said mobile body (column 18, lines 16-22, 28-29). Tso does not specifically teach location information indicates a location at which said mobile body exists at the time said processing should be executed.

However, Hancock taught location information indicates a location at which said mobile body exists at the time said processing should be executed (column 29, lines 39-43, 46-55). It would have been obvious at the time the invention was made that incorporating Hancock's use of future location information in Tso system for distributing information based on the location of the subscriber would have improved system effectiveness. The motivation would have been to provide enhanced customized information by utilizing route information when determining the geographical location utilized in Tso's system.

27. Regarding dependent claim 5, Tso does not specifically teach location information indicates a location at which said mobile exists at the time said processing should be executed; and

said means for receiving further receives time information indicative of a time at which said processing should be executed. However, Hancock taught location information indicates a location at which said mobile exists at the time said processing should be executed (column 29, lines 39-43, 46-55); and

said means for receiving further receives time information indicative of a time at which said processing should be executed (column 31, lines 17-20). For motivation for combination see claim 4, above.

28. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock in view of Wecker et al., USPN 6,311,058 (hereafter referred to as Wecker).

29. Regarding dependent claim 10, Hancock does not specifically teach maintaining the processing executed at the earliest time. However, Wecker taught when it is determined that said processing is executed by a plurality of said processing units, said method further comprising maintaining the processing executed at the earliest time by one of said processing units, and discarding the processing executed by the rest of said processing units (column 14, lines 15-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Wecker's discarding duplicate packets in Hancock's system for providing information based on geographic position doing so would have increased system efficiency. The motivation would have been to reduce the time and resources that the mobile body needs to process the response to the initial inquiry.

30. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock in view of Yoneyama et al., USPN 5,187,810 (hereafter referred to as Yoneyama).

31. Regarding dependent claim 19, Hancock taught mobile body is a vehicle moving on a road (column 23, lines 44-45). Hancock does not specifically teach processing unit is a roadside station installed near the road. Yoneyama taught processing unit is a

roadside station installed near the road (column 4, lines 38-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Yoneyama's roadside station in Hancock's system for providing information tailored to geographic location because doing so would have improved system effectiveness. The motivation would have been to reduce potential communication losses from processing stations too far from the mobile body.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ben-Yehezkel et al., USPN 6,049,711: taught an information service request and a location signal are transmitted from a subscriber unit, an information service message is generated in response to the request and the location as determined using the location signal, and then transmitted to the subscriber unit;

Hollenberg, USPN 6,091,956: taught a wireless system for providing services and time-critical information about places and events to mobile computers and their users proximate to their current location or potential destinations;

Landgren, USPN 6,115,754: taught a system and method for appending location information to a communication sent from a mobile terminal operating in a wireless communication system to an Internet server; and

Smith et al., USPN 6,580,914 B1: taught a method and apparatus for automatically providing location-based information content on a wireless device.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is (703) 305-3938. The examiner can normally be reached on Monday-Friday from 10:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam, can be reached on (703) 308-6662. The fax phone number(s) for this Group is official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


PATRICE WINDER
PRIMARY EXAMINER